

Release Notes

hp StorageWorks Continuous Access EVA User Interface

Product Version: 1.2

Fifth Edition (September 2004)

Part Number: T3661-96006

This document provides information that is not covered elsewhere in user documentation for the HP StorageWorks Continuous Access EVA user interface v1.2 with Virtual Controller Software versions 3.0, 3.01, and 3.020. Individuals responsible for configuring, installing, and using the Continuous Access user interface should refer to this document for last-minute content.

For the latest version of these release notes and other Continuous Access EVA documentation, access the HP storage web site at <http://h18000.www1.hp.com/storage/software.html> and then navigate to the Continuous Access EVA product page. From there, click the technical documentation link.



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Continuous Access EVA User Interface Release Notes
Fifth Edition (September 2004)
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Intended audience

This document is intended for customers who have licensed Continuous Access EVA versions 1.0 or higher for their storage systems. This document contains release note information for the Continuous Access user interface v1.2 and any patches for this version.

Related documentation

In addition to this document, HP provides the following related information:

The following documents are available from

<http://h18006.www1.hp.com/products/storage/software/conaccesseva/index.html>

- *HP StorageWorks Continuous Access EVA v1.1B Release Notes*
- *HP StorageWorks Continuous Access EVA v1.1 Getting Started Guide*
- *HP StorageWorks Continuous Access EVA v1.1 Getting Started Guide*
- *HP StorageWorks Continuous Access EVA v1.1B Operations Guide*
- *HP StorageWorks Continuous Access EVA v1.1B Design Reference Guide*
- *HP StorageWorks Continuous Access User Interface v1.1A Installation Guide*
- *HP StorageWorks Continuous Access EVA User Interface Installation Guide Addendum*
- *HP StorageWorks Continuous Access EVA User Interface Release Notes*

The following documents are available from

<http://h18006.www1.hp.com/products/sanworks/managementappliance/documentation.html>

- *HP OpenView Storage Management Appliance Software: Using Multiple Storage Management Appliances in a SAN Application Notes v2.1*
- *HP OpenView Storage Management Appliance Software High Availability v2.1*
- Continuous Access user interface Online Help (accessible by using the help button on the user interface)

Reading related documents

When reading earlier versions of Continuous Access documents, please use the table below to update the terminology in those older documents.

Table 1: Later versions and added components

References to	Also apply to
Storage Management Appliance (SMA)	Management server
Command View EVA 3.2	Command View EVA 3.3
Storage Operations Manager 1.1	Storage Operations Manager 1.2
Continuous Access EVA 1.1, 1.1a, 1.1b	Continuous Access EVA 1.2
Business Copy 2.2	Business Copy 2.3
VCS 3.010	VCS 3.014 and VCS 3.020
SMI-S 3.2	SMI-S 3.3

Two installation paths

For SMA installation, use the SWP file and refer to the *HP StorageWorks Continuous Access User Interface v1.1A Installation Guide*. For management server installation, use the .exe file and refer to the *HP StorageWorks Continuous Access EVA User Interface Installation Guide Addendum*.

Continuous Access user interface issues on the Storage Management Appliance

The following issues have been identified in the Continuous Access user interface v1.2 and subsequent patches.

Access denied message upon installation

When attempting to install the Continuous Access user interface from a Storage Management Appliance (SMA), you may encounter an **Access Denied** message after selecting the SWP file and clicking **Next**. In this situation, delete all temporary files and folders located in C:\TEMP, and then restart the installation.

Unable to find the server error messages

When starting the Continuous Access user interface, you may encounter the following error message: **Unable to find the server** (see [Figure 1](#)).



Figure 1: Server Communication Error

If this happens, try the following actions:

- Change the address of the SMA from “localhost” to the TCP/IP address.

This message is displayed if you try to run the Continuous Access user interface from the browser on the console of your SMA. Because the Continuous Access user interface is configured to run from a client workstation, you need to modify the way you start the Continuous Access user interface if you want to run it from the SMA.

To run the Continuous Access user interface from the console of the SMA:

1. Start your browser from the SMA console.
The SMA Home page opens.
2. Click **Tools**.
3. In the address box of your browser, change the localhost setting to the TCP/IP address of the SMA. For example, if the TCP/IP address of your SMA is 100.10.1.10, you would enter it as shown in [Figure 2](#).

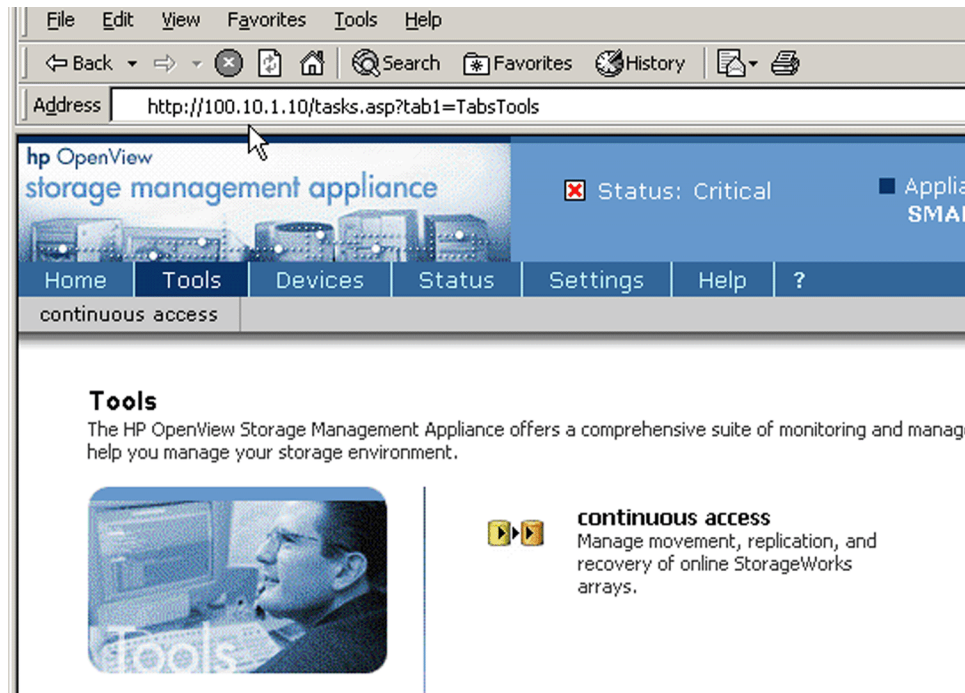


Figure 2: Changing localhost to the TCP/IP address to run the Continuous Access user interface from the SMA console

4. Click **continuous access**.

The Continuous Access user interface starts.

- Close and reopen all browser connections to the SMA. This can fix the error when caused for the following reasons:
 - The browser's caching strategy prevents the browser from communicating with processes running on the SMA.
 - The Continuous Access user interface server is still starting. The Continuous Access user interface waits for Command View EVA to start first.
 - The "unable to find the server" dialog box appears behind a Continuous Access user interface browser window. Respond to the message and reopen the application to clear the condition.
 - The Continuous Access user interface is being accessed from the SMA. This is not supported. Close the browser window and browse to the application from another client.
- Verify that Command View EVA is installed on the SMA. When the Continuous Access user interface starts, it displays this message if it cannot find Command View EVA. If Command View EVA is not installed on the SMA, install it before starting the Continuous Access user interface.
- Verify that the SANworks Module Loader is present as a service on the SMA.

If the SANworks Module Loader is not present, reboot the SMA. After rebooting, if the SANworks Module Loader is still not present, uninstall and reinstall the Continuous Access user interface.

If the SANworks Module Loader is present as a service, manually stop and restart it. To do this:

1. Exit all browser connections to the SMA.
2. Log in to the active SMA using the console interface or terminal services.
3. From the SMA desktop, click **Start > Settings > Control Panel > Administrative Tools > Services**.

The Services window opens.

4. Right-click the **SANworks Module Loader** service and then click **Stop** (see [Figure 3](#)).
5. The status changes from Started to blank.
6. Right-click the **SANworks Module Loader** service and then click **Start**.

The status changes from blank to Started.

The Continuous Access user interface is ready to be restarted.

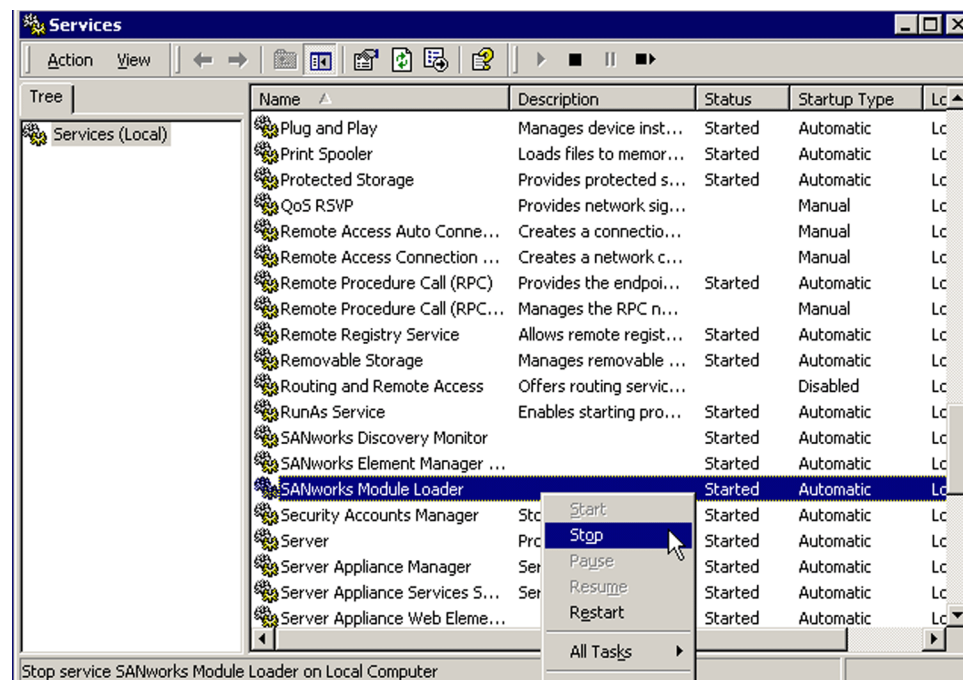


Figure 3: Stopping the SANworks Module Loader service

- Delete your database if you see the following messages in the *message.log* file, which is found on the SMA in the folder C:\Program Files\Compaq\SANworks\Modules:

```
Error: Failed to load from database after rollback!
Caught exception:
javax.transaction.TransactionRolledbackException:
Failed to read from database:
```


To delete the Continuous Access user interface database:

1. Log in to the active SMA using the console interface or terminal services.
2. Stop the SANworks Module Loader (see steps 2, 3, and 4 in the procedure above for detailed instructions on how this is done).

3. Browse to the C:\Program Files
\Compaq\SANworks\Modules folder and delete the file named message.log.

If folder options on the SMA are set to **Hide file extensions for known types**, this file is displayed as message.

4. Browse to each of the following four folders and delete all files with a .db extension:

C:\Program Files

\Compaq\SANworks\Modules\drm\database

C:\Program Files

\Compaq\SANworks\Modules\drm\database\backup

C:\Program Files

\Compaq\SANworks\Modules\nexus\database

C:\Program Files

\Compaq\SANworks\Modules\nexus\database\backup

Caution: Do not delete the backup folders in either of the two database folders.

5. Reboot the SMA.

After restarting the SMA, start the Continuous Access user interface normally.

Logging and events

The following issues relate to Logging and Events.

View Log Activity tab may require manual refresh

The Continuous Access user interface updates the View Log Activity tab every two hours by default or at the time interval specified in the `nexus.properties` file (see “Changing the Log Refresh Interval” in the Continuous Access user interface online help).

This update to the Continuous Access user interface, however, is principally designed to automatically detect new logging activity; it is not the same as performing a Refresh Display operation. The automatic update displays cached information about the status of logging activities. Consequently, logging messages that are not a first occurrence may contain outdated information.

To force the Continuous Access user interface to actively poll for the most recent status of logging activity, perform a Refresh Display operation.

Multiple events

The Continuous Access user interface may display what appear to be duplicate events. This is expected behavior in the following cases:

- When you operate on a DR group, the storage systems generates an event for each half of a DR group. In some cases, it is clear that one event is for the source and the other is for the destination; however, in some cases the events are labeled identically.
- If you have configured active-active SMAs, both SMAs generate events in the SAN. Consequently, duplicate entries for the same event display in both SMA's event logs.
- If the time stamps of multiple events do not match, refer to “Synchronizing Time on the SMAs” in Chapter 5 of the *HP StorageWorks Continuous Access EVA V1.1B Operations Guide*.

Event codes

The following issues are related to event codes if you are using VCS v3.020.

Event codes with VCS V3.020

The following events listed in step 8 of the Continuous Access user interface online help topic “Configuring the Storage Management Appliance for Events” do not exist for VCS v3.020:

- c 0 0 c
- c 1 5f c
- c 2 61 c

New VCS v3.020 event codes

The following event codes are new to VCS v3.020 and are helpful for troubleshooting in the Command View Event Log. However, these event codes are not displayed in the Continuous Access user interface:

- c 17 63 c
- c 18 64 c
- c 1a 0 c

- c 1c 61 c
- c 1d 0 c
- c 1e 5f c
- c 1f 0 c
- c 20 65 c
- c 21 66 c

If you are using VCS v3.020, then the event code displayed in the Continuous Access user interface as c 15 0 c is displayed as c 15 5f c in the Command View Event Log.

If you are using VCS v3.020, the Event Code Descriptions in the online help are not accurate. The following table should be referenced instead.

Table 2: Event codes and descriptions

Event code	CA-UI description
0946000e	A DR Group was created.
0947000e	A DR Group was deleted.
0971000f	A controller has received a request to shutdown.
0972000f	A controller has completed its shutdown preparations.
0973000f	The Failsafe state of a DR Group has been enabled or disabled.
0974000f	The Replication Mode of a DR Group has changed at the source or destination.
0975000f	The Operational state of a DR Group has changed to Synchronous or Asynchronous.
0976000f	Access to a Destination Vdisk has been enabled or disabled.
0977000f	A DR Group failover has occurred.
0978000f	A DR Group has been suspended or resumed.
0979000f	A Vdisk was added to a DR Group.
097a000f	A Vdisk was removed from a DR Group.
09c85105	A Vdisk has lost data.
09c95105	A Disk Group has gone inoperative.
09ca5105	A Vdisk has failed.
09cc5105	A Vdisk has lost data.
09cdc305	A Fibre Channel port located on the rear panel of the controller has failed.
09ce0005	A Disk Group has gone inoperative.
09cf4105	A Physical Disk Drive is no longer present.
09d35105	A DR Group member has gone inoperative, and the remaining members have been forced inoperative.
09d40005	A DR Group has become operative.
09d50005	A Physical Disk Drive is only accessible on a Single Port.
0c03000c	A Source Vdisk is now merging, because the alternate Storage System or Destination Vdisk is now accessible or resumed.
0c045f0c	A DR Group has entered the Failsafe Locked state.
0c05600c	A DR Group has entered the Failsafe Locked state.

Event code	CA-UI description
0c06600c	An unrecoverable read error occurred during a Full Copy. The Full Copy was terminated.
0c075f0c	A Full Copy terminated prior to completion. A remote copy error occurred due to an inaccessible Destination Storage System. The Full Copy will continue when the Destination Storage System is restored.
0c08610c	A Full Copy terminated prior to completion. A remote copy error occurred due to an inaccessible Destination Storage System. The Full Copy will continue when the Destination Vdisk is restored.
0c09620c	A Log has been reset due to insufficient disk group capacity. The Destination Vdisk has been marked for a Full Copy.
0c0a000c	A Log has been reset due to a DR Group failover.
0c0c000c	A Destination Vdisk has successfully completed a Merge.
0c0f000c	A DR Group is no longer in a Failsafe Locked state.
0c10000c	A Destination Vdisk has been marked for a Full Copy.
0c11000c	A Storage System has just discovered that a DR Group failover has taken place. A Vdisk is transitioning from a Source role to a Destination role.
0c12000c	A DR Group member is transitioning from a Destination role to a Source role.
0c155f0c	The Data Replication Path between this Site and the Alternate Site has closed.
0c17630c	The communications protocol version between Source and Destination Site is mismatched.
0c18640c	Initiating logging on Source Virtual Disk because conditions on Destination Site are preventing replication throughput.
0c1b5f0c	A DR Group is logging because the alternate Storage System is not accessible.
0c1c610c	A DR Group is logging because the Destination Vdisk is not accessible.
0c1d000c	A software problem was found in a DR Group log. A full copy will be initiated.
0c1e5f0c	The members of a DR Group have not been presented to the host because the alternate Storage System is not accessible. Suspend DR Group to override this behavior.
0c1f000c	The members of a DR Group have been presented to the host because the alternate Storage System is accessible or DR Group is suspended.
0c20650c	Conditions on the Data Replication Destination Site are preventing replication processing.
0c21660c	Conditions on the Data Replication Source Site are preventing replication processing.

Refresh takes a long time or appears to hang

In rare circumstances, the Continuous Access user interface attempts a refresh operation and requests information from the underlying hardware while it is busy rebuilding internal data. If the user interface detects this situation, it retries the request after a three-second delay. Depending on the configuration of the SAN, this can result in a noticeable delay for the refresh operation. Refresh will take even longer over low-bandwidth, high-latency lengths.

Unknown Storage error message

On rare occasions, the Continuous Access user interface or CV EVA will report a storage array as being Unknown Storage. Restarting the user interface or rebooting the server usually clears the problem. This is especially common on low-bandwidth, high-latency lengths.

Suspend displayed until full copy completed

When a DR group fills available disk space with its log, the members of the DR group are marked for a full copy. If you use the Continuous Access user interface to resume the link (or data replication), the properties on the DR group still display the state of the DR group as suspended until the full copy is complete.

The Continuous Access user interface log files

The Continuous Access user interface stores logging information on the SMA in two files:

- `message.log` found at `C:\Program Files\Compaq\SANworks\Modules`
- `commandlog.log` found at `C:\Program Files\Compaq\SANworks\Modules\nexus\resources`

These files are for the use of HP service and support personnel.

About message.log

The Continuous Access user interface writes errors, exception dumps, and stack traces to the `message.log` file. The information contained in this file is useful to the developers because much of this information refers back to specific lines of code. This log file can grow to 5 MB, and then it is either saved with `.old` appended to the name or it overwrites the existing `message.log.old` file.

About commandlog.log

The user interface writes messages about internal processes to the `commandlog.log` file. This file contains all internal message traffic. While this file is viewable to customers, it is not meant for customer diagnostics. The size of this log file is set by default to 5 MB. When the log file fills up, it is either saved as `old_commandlog.log` or it overwrites the existing `old_commandlog.log` file. Afterwards, a new (and empty) `commandlog.log` file is written to.

You can configure the `commandlog.log` file size in the entry called `LogSize` in the `nexus.properties` file in the folder `C:\Program Files\Compaq\SANworks\Modules\nexus\properties`. The entry is in bytes. For example, 5000000 (the default) is equal to 5 MB. There are also two entries in `nexus.properties` that let you change the name of the `commandlog.log` file and the name of the overflow log file.